- (5) It is free of visible defects.
- (c) For the purpose of paragraphs (a)(1) and (b)(1) of this section, where pipe of a diameter included in a listed specification is impractical to use, pipe of a diameter between the sizes included in a listed specification may be used if it:
- (1) Meets the strength and design criteria required of pipe included in that listed specification; and
- (2) Is manufactured from plastic compounds which meet the criteria for material required of pipe included in that listed specification.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192–19, 40 FR 10472, Mar. 6, 1975; Amdt. 192–58, 53 FR 1635, Jan. 21, 1988]

#### § 192.61 [Reserved]

### §192.63 Marking of materials.

- (a) Except as provided in paragraph (d) of this section, each valve, fitting, length of pipe, and other component must be marked—
- (1) As prescribed in the specification or standard to which it was manufactured, except that thermoplastic fittings must be marked in accordance with ASTM D2513-87 (incorporated by reference, see § 192.7);
- (2) To indicate size, material, manufacturer, pressure rating, and temperature rating, and as appropriate, type, grade, and model.
- (b) Surfaces of pipe and components that are subject to stress from internal pressure may not be field die stamped.
- (c) If any item is marked by die stamping, the die must have blunt or rounded edges that will minimize stress concentrations.
- (d) Paragraph (a) of this section does not apply to items manufactured before November 12, 1970, that meet all of the following:
- (1) The item is identifiable as to type, manufacturer, and model.
- (2) Specifications or standards giving pressure, temperature, and other ap-

propriate criteria for the use of items are readily available.

[Amdt. 192–1, 35 FR 17660, Nov. 17, 1970, as amended by Amdt. 192–31, 43 FR 883, Apr. 3, 1978; Amdt. 192–61, 53 FR 36793, Sept. 22, 1988; Amdt. 192–62, 54 FR 5627, Feb. 6, 1989; Amdt. 192–61A, 54 FR 32642, Aug. 9, 1989; 58 FR 14521, Mar. 18, 1993; Amdt. 192–76, 61 FR 26122, May 24, 1996; 61 FR 36826, July 15, 1996; Amdt. 192–114, 75 FR 48603, Aug. 11, 2010]

### § 192.65 Transportation of pipe.

- (a) Railroad. In a pipeline to be operated at a hoop stress of 20 percent or more of SMYS, an operator may not use pipe having an outer diameter to wall thickness ratio of 70 to 1, or more, that is transported by railroad unless:
- (1) The transportation is performed in accordance with API Recommended Practice 5L1 (incorporated by reference, see §192.7).
- (2) In the case of pipe transported before November 12, 1970, the pipe is tested in accordance with Subpart J of this Part to at least 1.25 times the maximum allowable operating pressure if it is to be installed in a class 1 location and to at least 1.5 times the maximum allowable operating pressure if it is to be installed in a class 2, 3, or 4 location. Notwithstanding any shorter time period permitted under Subpart J of this Part, the test pressure must be maintained for at least 8 hours.
- (b) Ship or barge. In a pipeline to be operated at a hoop stress of 20 percent or more of SMYS, an operator may not use pipe having an outer diameter to wall thickness ratio of 70 to 1, or more, that is transported by ship or barge on both inland and marine waterways unless the transportation is performed in accordance with API Recommended Practice 5LW (incorporated by reference, see §192.7).

[Amdt. 192–114, 75 FR 48603, Aug. 11, 2010]

# Subpart C—Pipe Design

### §192.101 Scope.

This subpart prescribes the minimum requirements for the design of pipe.

## §192.103 General.

Pipe must be designed with sufficient wall thickness, or must be installed with adequate protection, to withstand anticipated external pressures and